

Remarks

No amendments have been made to the claims pending in this application. Claims 21-30 and 43-52 remain pending in this application.

The Applicant believes that it will be useful to review the invention recited in the claims pending in this application. As recited most clearly in claim 1, one aspect of the invention is “A sound system for a spa,” for example, for a hot tub. According to this aspect of the invention, the spa includes “a housing having an upper rim of substantially uniform elevation.” [Emphasis added.] In addition, the sound system comprises “a head rest mounted on or below the upper rim so as not to substantially alter the substantially uniform elevation and adapted to support the head of an occupant of the spa, the head rest having at least one sound emitting perforation; and at least one electronic speaker positioned to transmit sound through the at least one sound emitting perforation in the headrest.” [Emphasis added.]

The significance of the limitation “not to substantially alter the substantially uniform elevation” is better understood by reviewing the advantages of aspects of the invention compared to the existing art, for example, as described in paragraph 0006 of the present specification. In this paragraph, the Applicant describes the shortcomings of prior art practices of mounting speaker assemblies to spas. Specifically, when adding an audio speaker or head rest to a spa housing, typically, a molded fiberglass housing, it is undesirable to significantly modify the housing shape to accommodate the audio speaker. That is, it is desirable not to substantially change the “substantially uniform elevation” of the housing of the spa. For example, it is undesirable to add projections or bulges to the housing that extend beyond the nominal height of the spa housing. Such extensions typically require that either (1) the housing molding tooling be modified to provide the extension, or (2) a specially-designed extension be fabricated and affixed, for example, glued, to the existing housing. As noted in the final lines of paragraph 0006, such extensions are undesirable since, among other things, they add to the fabrication cost of the spa. However, aspects of the present invention overcome

these disadvantages of the existing art by, among other things, permitting the fabricator to introduce a sound system having a headrest to a spa, for example, an existing spa, without requiring structural modification of the spa.

In addition, as noted in paragraph 0008 of the present specification, introducing extensions to the height of a spa housing adversely impacts the packaging of the spa for shipping. Hot tubs and spas are typically shipped stacked one inside another. Any increase in the elevation of a spa typically will decrease the number of spas that can be shipped per unit volume. Of course, this is undesirable from the manufacturer's point of view and is typically avoided. That is, again, it is desirable not to substantially change the "substantially uniform elevation" of the housing of the spa. According to aspects of the present invention, this disadvantage of the existing art is overcome. In one aspect, a sound system having a head rest may be introduced to a spa without affecting the packaging and shipping of the spa.

These and other disadvantages of prior art means of introducing sound systems to a spa are overcome by aspects of the invention. For example, by introducing a sound system to a spa without substantially modifying the "substantially uniform elevation" of the spa, a less expensive spa with respect to, among other things, fabrication and shipping is provided. These aspects of the invention are most clearly illustrated in Figures 1 and 9 of the present specification, where a sound system having a head rest (for example, head rest 20 in Figure 1) is introduced to a spa (14 in Figure 1) while having little if any impact upon the spa housing, its fabrication, packaging, and shipment. These benefits of the present invention are not found in the prior art, and are specifically not taught or suggested by the references cited in the subject Action.

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Response to Rejections in the Office Action

1. Response to Anticipation Rejection based upon Kvalvik

In the paragraphs at the top of page 2 of the Action, the Patent Office Rejected claims 21, 23, 24, 26, 29, and 43-48 as anticipated by what is disclosed in U.S. Patent 4,715,546, of Kvalvik [herein “Kvalvik”]. The Applicant respectfully submits that this rejection is inappropriate and requests that this rejection be reconsidered and withdrawn based upon the following comments and observations.

The Applicant’s undersigned Agent often refers to the MPEP for guidance for determining when an anticipation rejection is appropriate. For instance, MPEP § 2131 defines the conditions under which an anticipation rejection is appropriate:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim..."

With reference to the rejection of claim 21, the Applicant submits that Kvalvik does not does not include “each and every element” as set forth in the claim. First, as clearly stated in its title, Kvalvik discloses a “tub cushion.” In contrast to the invention recited in claim 21, the tub cushion of Kvalvik is not a sound system for a spa, as claimed. For this reason alone, the Applicant submits that this rejection is inappropriate and requests that this rejection be withdrawn.

Second, contrary to the comments of the Patent Office, the cushion of Kvalvik does not have “an upper rim of substantially uniform elevation,” as claimed. Specifically, the headrest 30 of Kvalvik clearly extends beyond the elevation of the cushion, for example, as identified by rim 18. Among other things, this is essentially the prior art discussed above over which the present invention is an improvement. Contrary to the comments made by the Patent Office, as shown in Figures 1 and 2 of Kvalvik, the

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upper rim 18 of the substantially uniform elevation of the cushion of Kvalvik is clearly altered to accommodate the headrest 30. That is, contrary to the claimed invention, Kvalvik does “substantially alter the substantially uniform elevation” of the tub cushion. For this reason, the Applicant submits that since Kvalvik does not disclose “each and every element as set forth in the claim” and does not disclose “[t]he identical invention...shown in as complete detail as is contained in the... claim,” this rejection of claim 21 as anticipated by Kvalvik is inappropriate and should be reconsidered and withdrawn.

With respect to the rejection of claims 23, 24, 26, 29, and 43-48 as anticipated by Kvalvik, the Applicant submits that these rejections are inappropriate for the same reasons the rejection of claim 21, from which they depend, is inappropriate. However, the limitations of some of these claims include distinctions that further distinguish from what is disclosed in Kvalvik. For instance, with respect to claim 29, Kvalvik does not include any structure that can be considered a “sound wave guide adapted to transmit sound waves from the at least one electronic speaker to the at least one sound emitting perforation in the head rest.” With respect to claim 29, the Patent Office has identified the “speaker wires” or “the ambient air” of Kvalvik as the claimed sound wave guides. The Applicant believes it is abundantly clear from the disclosure provided in the instant specification that a “sound wave guide” is just that, a guide for transmitting sound waves, that is, air compression waves, from a first location to a second location. For example, conduits 58 and 60 shown in Figure 4B and similar unnumbered conduits in Figure 5B clearly represent the structure of a wave guide according to one aspect of the invention, that is, conduits that act as passages for directing the flow of sound. Clearly, contrary to the comments of the Patent Office, the “speaker wires” and the “ambient air” of Kvalvik in no way provide this function. The Applicant requests that this rejection of claim 29 be reconsidered and withdrawn.

Also, with respect to claims 43 and 44, contrary to the comments by the Patent Office, the headrest 30 of Kvalvik is not mounted directly to the housing of the spa (or

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tub) but to the tub cushion 10. In this regard, the Applicant is unclear about the Patent Office's reference to Figure 5 of Kvalvik. The Applicant assumes that this is a typographical error. Similarly, with respect to claim 46, the headrest 30 of Kvalvik is not mounted to a rigid structure, but to the resilient tub cushion. With respect to claim 47, the headrest 30 of Kvalvik is not mounted to the rim of the housing (or tub), but to the resilient tub cushion. Moreover, with respect to claim 48, the headrest 30 of Kvalvik is not mounted to the spa housing wherein the substantially uniform elevation of the spa is unchanged. Clearly, the headrest of Kvalvik interrupts the substantially uniform elevation of the tub of Kvalvik. The Applicant requests that all these rejections based upon anticipation by Kvalvik be reconsidered and withdrawn.

2. Response to Obviousness Rejection based upon Kvalvik

In the paragraphs bridging pages 2 and 3 of the Action, the Patent Office rejected claims 22, 25, 27, 28, and 30 as obvious in view of what is disclosed Kvalvik. The Applicant submits that these rejections are inappropriate for the same reasons the rejection of claim 21, from which they depend, is inappropriate, as outlined above. The Applicant requests that these rejections be reconsidered and withdrawn.

3. Response to Obviousness Rejection based upon Diamond and Kvalvik

Beginning in the second paragraph on page 3 of the Action, the Patent Office also rejected claims 21-30 and 43-048 under 35 U.S.C. 103(a) as obvious in view of the combined teachings of U.S. Patent 4,575,882 of Diamond [herein "Diamond"] and Kvalvik. The Applicant submits that these rejections are inappropriate and requests that they be reconsidered and withdrawn.

Again, the Applicant typically refers to the MPEP for guidance in determining whether an obviousness rejection is appropriate. Specifically, section 2143 of the MPEP states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). [Emphasis added.]

With respect to claim 21 and its dependents, the Applicant submits that "an upper rim of substantially uniform elevation" as claimed, is not taught or suggested by either Diamond or Kvalvik. Contrary to the comments made by the Patent Office, Diamond does not teach a spa having "an upper rim of substantially uniform elevation." The Patent Office references Figure 1 of Diamond. However, in viewing Figure 1, the Applicant submits that this is another example of the very art over which the present invention is an improvement. As shown in Figure 1 of Diamond, the upper rim 28 of the tub 10 clearly defines one elevation, and this elevation is interrupted, or made "non-uniform," by the introduction of "collar 30." Clearly, contrary to the preamble of claim 21, the tub of Diamond does not have an upper rim of substantially uniform elevation. Specifically, the mounting of collar 30 provides an upper rim that is substantially "non-uniform," contrary to the invention claimed. Diamond's collar 30 clearly negatively impacts both the fabrication and packaging of tub 10, contrary to the very advantages of the present invention discussed above. Thus, the Applicant submits that Diamond does not teach or suggest "an upper rim of substantially uniform elevation." That Kvalvik also fails to teach or suggest this feature of the claimed invention is discussed above in response to the anticipation rejection. Based upon this abundantly clear distinction between Diamond and Kvalvik and the invention recited in claim 21, and in view of the criteria recited in section 2143 of the MPEP concerning appropriate obviousness rejections, the Applicant submits that this rejection of claim 21 is inappropriate. The Applicant requests that this rejection be withdrawn.

Moreover, the Patent Office acknowledges that Diamond does not teach positioning a speaker in a tub to transmit sound through the perforations in a headrest.

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The Applicant concurs. The Patent Office then attempts to remedy this missing teaching in Diamond by citing Kvalvik. However, the Applicant submits that this combination is inappropriate and requests that it be reconsidered in view of the following.

First, the Applicant submits that, in addition to Diamond failing to teach that a speaker be positioned to transmit sound through the headrest, Diamond also fails to teach a headrest that is adapted in any way for transmitting sound therethrough. Specifically, there is no teaching or suggestion in Diamond that a headrest include any type of perforations through which sound can pass. Diamond includes minimal description and illustration of pillow 60 (see the lone passage bridging columns 2 and 3), and there is absolutely no teaching or suggestion that pillow 60 include perforations of any kind. Of course, there is no mention in Diamond of providing perforations in pillow 60 for emitting sound.

Regardless of the failure of Diamond to provide any teaching or suggestion of perforations in the pillow of Diamond or any teaching of a speaker positioned to transmit sound through the missing perforations in the pillow, the Patent Office claims that it would be obvious to locate the speaker of Kvalvik into the headrest of Diamond. However, in addition to the failure to teach or suggest the invention, the Applicant submits that Diamond itself teaches away from such a combination.

Again, the MPEP is instructive in this regard. Section 2104.02 of the MPEP provides the following guidelines when considering the obviousness of a claimed invention in view of the prior art:

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) [Emphasis added.]

Specifically, the pillow 60 of Diamond is intended to be immersed in or at least closely contacted by water. Such close association with water, without some form of

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isolation means (which is neither disclosed nor suggested by Diamond) will likely introduce the potential for electric shock when introducing the electric speaker of Kvalvik to the pillow of Diamond as suggested by the Patent Office. As disclosed in the passage bridging columns 2 and 3 of Diamond (and illustrated in 1A), pillow 60 is closely associated with water jet 18. As described in the referenced passage, water not only impacts pillow 60 from water jet 18, but also “water from the channels 50 [see Figure 1A] drains around the pillow 60.” Thus, Diamond discloses that pillow 60 is intimately contacted with water, and thus pillow 60 is not conducive for introducing an electrical device, such as an electronic speaker, that could produce a potential electric shock or electrocution hazard. Accordingly, the Applicant submits that the disclosure of Diamond clearly teaches away from the combining the electrical speaker of Kvalvik with the pillow of Diamond. The Applicant requests that this rejection be reconsidered and withdrawn.

With respect to the rejection of claims 22-30 and 43-48 as obvious in view of Diamond and Kvalvik, the Applicant submits that these rejections are inappropriate for the same reasons the rejection of claim 21, from which they depend, is inappropriate. However, the limitations of some of these claims include distinctions that further distinguish from what is disclosed in Diamond and Kvalvik. For instance, with respect to claim 29 and the limitation “sound wave guides,” Diamond does not provide the teachings that, as discussed above, are missing from Kvalvik. There are no sound wave guides in Diamond directing sound from the electronic speaker to the pillow 30. The Applicant requests that this rejection of claim 29 be reconsidered and withdrawn.

4. Traversal of Restriction

With respect to the withdrawal of claims 49-51, the Applicant hereby traverses the restriction upon which this withdrawal is based. The Applicant requests that should one or more claims be deemed allowable, that claims 49-51 be rejoined.

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5. Conclusion

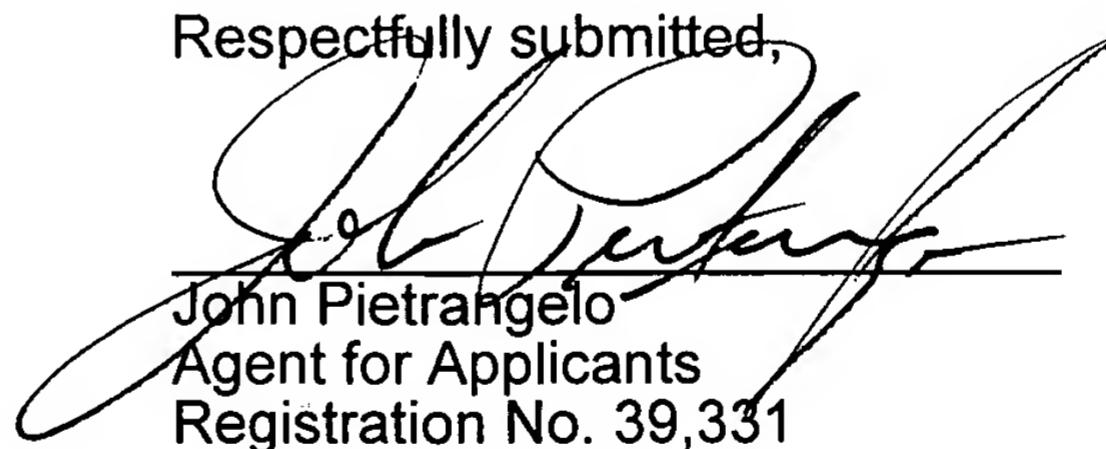
In summary, the Applicant Respectfully submits that:

- 1) Claims 21, 23, 24, 26, 29, and 43-48 are not anticipated by Kvalvik, as discussed in section 1 above.
- 2) Claims 22, 25, 27, 28, and 30 are not obvious in view of Kvalvik, as discussed in section 2 above.
- 3) Claims 21-30 and 43-48 are not obvious in view of Diamond and Kvalvik, as discussed in section 3 above.

The Applicant respectfully requests that the rejections of these claims be reconsidered and withdrawn.

The Applicant believes that the application is in condition for allowance. An early and favorable action on the merits of the application is requested. If a telephone conference would be of assistance in advancing prosecution of the subject application, the Applicant's undersigned Agent invites the Examiner to telephone him at the number provided.

Respectfully submitted,



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